CLAIMS

What is claimed is:

1. A method for dynamically binding a user interface to information, comprising: specifying with a first language a first action; specifying with a second language a first data source associated with the first

action;

rendering output with a third language based at least partially on the first action; wherein the second language is embedded in the first language; and wherein the first action can set or get the first data source.

2. The method of claim 1 wherein: the first language allows for the specification of JavaServer Page action elements.

The method of claim 1 wherein:
 the second language is based on the Javascript language.

4. The method of claim 1 wherein:

the first data source identifies one of: 1) an object field; 2) an object property; and 3) an Extensible Markup Language document element.

5. The method of claim 4 wherein: an object is a JavaBean.

6. The method of claim 1 wherein:

the first data source is one of: 1) an array; 2) a list; 3) a map.

7. The method of claim 1 wherein:

the third language can include at least one of: Hypertext Markup Language (HTML), Dynamic HTML, Extensible HTML, and Extensible Markup Language.

8. The method of claim 1 wherein:

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the first action can be a child of another action.

9. The method of claim 1 wherein:

the first action can have at least one child action.

10. The method of claim 9 wherein:

the at least one child action can have at least one other child action.

11. The method of claim 9 wherein:

the at least one child action can selectively process the first data source.

12. The method of claim 9 wherein:

the at least one child action can refer to the first data source with a context defined by the first action.

13. The method of claim 9 wherein:

the at least one child action can perform at least one of the following actions on the first data source: 1) set; 2) get; 3) sort; and 4) filter.

- 14. The method of claim 9, further comprising: rendering a list or a table based on the first data source.
- 15. A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:

specify with a first language a first action; specify with a second language a first data source associated with the first action; render output with a third language based at least partially on the first action; wherein the second language is embedded in the first language; and wherein the first action can set or get the first data source.

The machine readable medium of claim 15 wherein:the first language allows for the specification of JavaServer Page action elements.

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- 17. The machine readable medium of claim 15 wherein: the second language is based on the Javascript language.
- 18. The machine readable medium of claim 15 wherein:the first data source identifies one of: 1) an object field; 2) an object property; and3) an Extensible Markup Language document element.
- 19. The machine readable medium of claim 18 wherein: an object is a JavaBean.
- 20. The machine readable medium of claim 15 wherein: the first data source is one of: 1) an array; 2) a list; 3) a map.
- 21. The machine readable medium of claim 15 wherein: the third language can include at least one of: Hypertext Markup Language (HTML), Dynamic HTML, Extensible HTML, and Extensible Markup Language.
- 22. The machine readable medium of claim 15 wherein: the first action can be a child of another action.
- 23. The machine readable medium of claim 15 wherein: the first action can have at least one child action.
- 24. The machine readable medium of claim 23 wherein: the at least one child action can have at least one other child action.
- 25. The machine readable medium of claim 23 wherein: the at least one child action can selectively process the first data source.
- 26. The machine readable medium of claim 23 wherein:

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the at least one child action can refer to the first data source with a context defined by the first action.

27. The machine readable medium of claim 23 wherein:

the at least one child action can perform at least one of the following actions on the first data source: 1) set; 2) get; 3) sort; and 4) filter.

28. The machine readable medium of claim 23, further comprising instructions that when executed cause the system to:

render a list or a table based on the first data source.

29. A computer data signal embodied in a transmission medium, comprising: a code segment including instructions to specify with a first language a first action;

a code segment including instructions to specify with a second language a first data source associated with the first action;

a code segment including instructions to render output with a third language based at least partially on the first action;

wherein the second language is embedded in the first language; and wherein the first action can set or get the first data source.

- 30. A software framework for rendering at least one object on a user interface, comprising:
 - a first language capable of specifying a first action;
- a second language capable of specifying a first data source associated with the first action:
- a third language capable of rendering output based at least partially on the first action;

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wherein the second language is embedded in the first language; and wherein the first action can set or get the first data source.

31. The framework of claim 30 wherein:

the first language allows for the specification of JavaServer Page action elements.

- 32. The framework of claim 30 wherein: the second language is based on the Javascript language.
- 33. The framework of claim 30 wherein:the first data source identifies one of: 4) an object field; 2) an object property; and3) an Extensible Markup Language document element.
- 34. The framework of claim 33 wherein: an object is a JavaBean.
- 35. The framework of claim 30 wherein: the first data source is one of: 4) an array; 2) a list; 3) a map.
- 36. The framework of claim 30 wherein:
 the third language can include at least one of: Hypertext Markup Language
 (HTML), Dynamic HTML, Extensible HTML, and Extensible Markup Language.
- 37. The framework of claim 30 wherein: the first action can be a child of another action.
- 38. The framework of claim 30 wherein: the first action can have at least one child action.
- 39. The framework of claim 38 wherein: the at least one child action can have at least one other child action.
- 40. The framework of claim 38 wherein:
 the at least one child action can selectively process the first data source.

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41. The framework of claim 38 wherein:

the at least one child action can refer to the first data source with a context defined by the first action.

42. The framework of claim 38 wherein:

the at least one child action can perform at least one of the following actions on the first data source: 4) set; 2) get; 3) sort; and 4) filter.

43. The framework of claim 38 wherein:

a list or a table can be rendered based on the first data source.

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